



Arkansas Department of Health

Hospital Inpatient Discharge Data

Annual Report

2011

Arkansas Department of Health
Health Statistics Branch
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INTRODUCTION

The Arkansas Hospital Discharge Data System is one of the most important tools for addressing a broad range of health policy issues. Act 670 of 1995, A.C.A. 20-7-201 et seq., requires all hospitals licensed in the state of Arkansas to report hospital information as prescribed by rules and regulations by the State Board of Health. “All hospitals” include acute care, critical access hospitals, specialty hospitals, long-term acute care hospitals, psychiatric and rehabilitation hospitals. The Act also specifically prohibits the release of any information from the collected data that identifies, or could be used to identify, any individual patient, provider, institution or health plan.

Beginning in 1996 with very limited data, the system has grown to include virtually all discharges with a stay of one or more days. Information reported includes demographics such as date of birth, gender, race and ethnicity. Clinical information includes dates of service, discharge status, diagnoses, procedures and injury data. Charges are included, as well.

The staff edits and completes these data, then combines data from all the hospitals into a dataset for each calendar year. The staff then is able to access information for policy, planning, and research applications for the submitting hospitals and many other interested parties. The de-identified datasets are shared with other states, for services provided in Arkansas to residents of that state, and with the Agency for Healthcare Research and Quality for their Healthcare Cost Utilization Project (HCUP).

About This Report

The report contains information about hospital utilization by bed size and hospital location (urbanity). In addition, there are summaries on the Major Diagnostic Categories (MDC), top Diagnosis Related Groups (DRG) and age group specific reports.

The target audience for this report is hospital officials, health care agencies, and policy makers. The information in the report gives a snapshot of inpatient health services in Arkansas for 2011. There is specific information for acute care, long-term care, psychiatric and rehabilitation facilities, as well as specific information regarding demographic groups.

OVERVIEW

In 2011, 106 of the 108 Arkansas hospitals reported to the Arkansas Department of Health. Of these, 92 are also members of the Arkansas Hospital Association.

The hospitals consist of

- 51 Acute Care Hospitals
- 29 Critical Access Hospitals*
- 9 Long Term Acute Care (LTAC) Hospitals
- 8 Rehabilitation Hospitals
- 9 Psychiatric Hospitals
- 2 Veterans Affairs Hospitals

Hospitals per State Region

- 16 Arkansas Valley Region
- 24 Metro Region
- 10 North Central Region
- 13 Northeast Region
- 17 Northwest Region
- 11 Southeast Region
- 17 Southwest Region

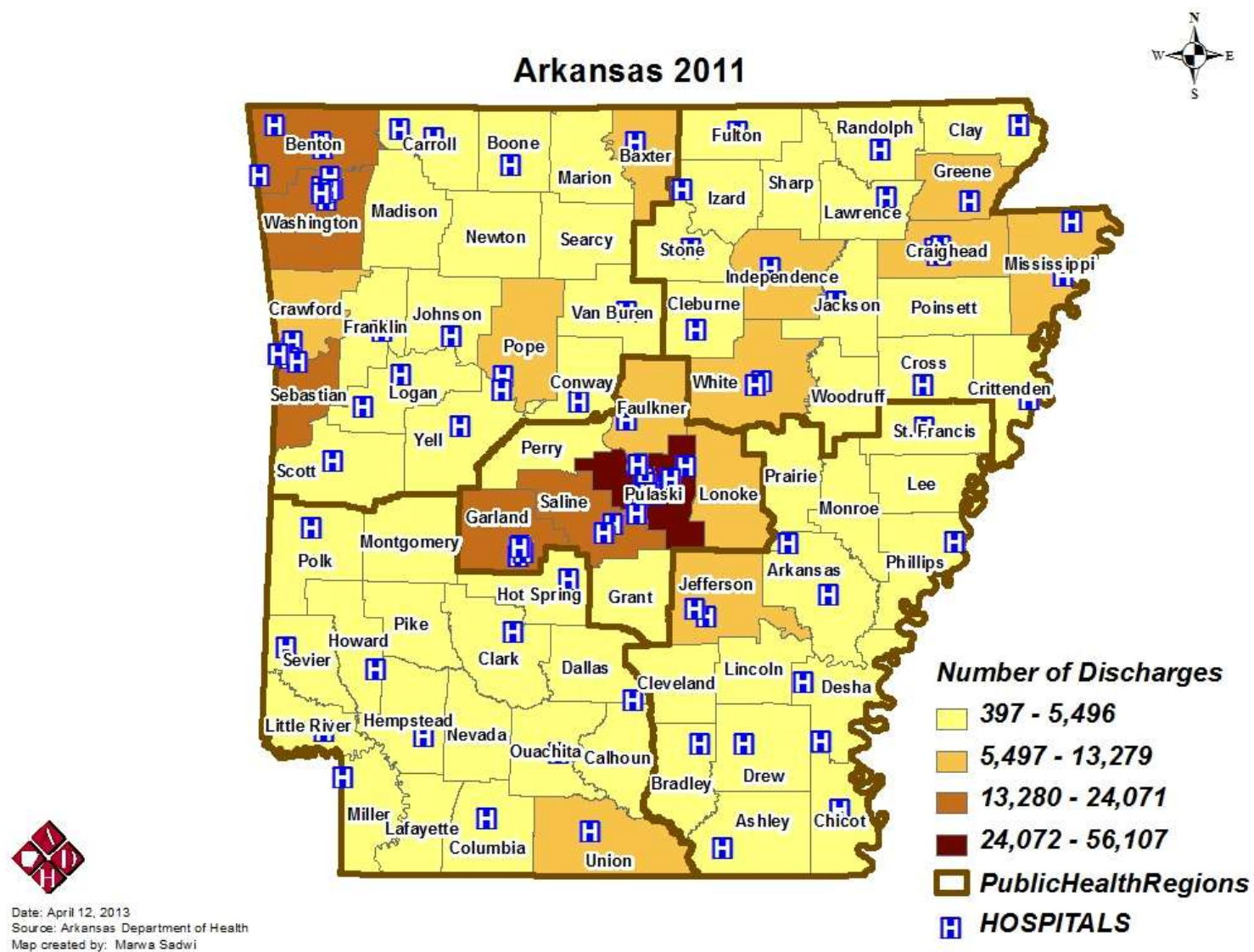


Counties serviced by an Arkansas hospital

- 20 do not have access to a hospital within county boundaries
- 38 counties are serviced by a single local hospital
- 17 counties are serviced by 2 or more hospitals

*Critical Access Hospitals are also Acute Care hospitals. They are listed separately on this page for information purposes.

MAP OF RESIDENT DISCHARGES BY COUNTY



HOSPITAL DISCHARGE DATA SUMMARY 2011

Overall Utilization

Total Discharges	410,220	Average Length of Stay	5.3
Total Patient Days	2,163,841	Average Charge per Discharge	\$ 24,597.09
Average Census per Day	5,928	Average Charge per Day	\$ 4,663.10

Age and Gender Distribution

	Discharges	% Discharges	% Days	% Charges
Female (240,796)				
Under 15 years	26,685	6.5	5.5	3.4
15 – 44 years	73,510	17.9	12.2	11.3
45 – 64 years	50,765	12.4	12.1	14.6
65 years and above	89,836	21.9	25.1	24.1
Male (169,422)				
Under 15 years	30,063	7.3	7.3	4.5
15 – 44 years	27,973	6.8	8.5	6.6
45 – 64 years	47,069	11.5	11.9	15.3
65 years and above	64,317	15.7	17.4	20.2

Resident / Non-Resident Utilization

	Discharges	% Discharges	% Days	% Charges
Arkansas Resident	389,452	94.9	2,036,090	94.1
Non-Resident	20,737	5.1	127,625	5.9
Unknown	31	0.0	126	0.0

Patient Discharge Status Distribution

Discharge Status	% Discharges
Home or Self Care	70.9
Other GMS Hospital	2.3
Skilled Nursing Facility	6.4
Intermediate Care Facility	1.5
Other Institution	0.7
Home Health	8.7
Left Against Medical Advice	0.6
Home IV Provider	0.0
Expired	2.2
Other	6.8

Expected Pay Source Distribution

Expected Primary Payer	% Discharges
Medicare	43.5
Medicaid	20.7
Other Government	1.3
Commercial Insurance	21.9
Self-Pay	7.0
Other/Unknown	5.7

Type of Admission Distribution

Admission Type	% Discharges
Emergency	37.2
Urgent	19.2
Elective	34.0
Newborn	9.2
Information Not Available	0.4

Obstetrical Utilization

Normal Deliveries	24,019	% of Deliveries	64.7
Cesarean Deliveries	13,103	% of Deliveries	35.3
Total Deliveries	37,122		
Total Births	37,506		

SOURCE: CY11 Arkansas Hospital Discharge Data System

HOSPITAL UTILIZATION

<u>Utilization</u>	<u>Total</u>	<u>Acute Care Facilities</u>			<u>Other Care Facilities</u>		
		<u>Large</u>	<u>Medium</u>	<u>Small</u>	<u>LTAC</u>	<u>Psych</u>	<u>Rehab</u>
Total Discharges	410,220	244,349	100,285	40,237	2,519	15,493	7,337
Number of Discharges Per 1000 Population	139	83	34	14	1	5	2

Table 1: The discharges from the Veteran's Affairs Medical Centers are not included in any counts.

Additional Source: The population used for determining Number of Discharges per 1,000 population was acquired from the U.S. Census Bureau.

Total Discharges and all of the utilization statistics related to these discharges are gathered from the reported information on the UB-04 billing form for inpatient services. They include counts from both resident and nonresident inpatients at acute care and specialty, long term acute care (LTAC), psychiatric, and rehabilitation hospitals in Arkansas. They are not unduplicated patient counts, but rather counts of individual episodes of care (discharges).

Total discharges represent the aggregated totals of inpatient discharges reported by each hospital for 2011. Number of discharges per 1,000 population represents the ratio of inpatient discharges per 1,000 of Arkansas resident population as recorded by state census counts for that year.

Hospital utilization and demographics are reported in two sections:

Section 1: Acute Care Facilities

Section 2: Other Care Facilities

Both sections of facilities are further distinguished within their sections. Acute care facilities are divided into large, medium, and small hospitals. Non-acute care or other facilities are divided into LTAC, psychiatric, and rehabilitation hospitals. Thorough explanations of these groupings are given within the individual sections.

Top DRG by All Age Groups

<u>Age Group and Principal DRG</u>	# of Discharges		Avg. Length of Stay	
	Female	Male	Female	Male
<u><1 year</u>				
Normal Newborn	12,874	12,579	1.8	1.8
Neonate W/ Other Significant Problems	2,928	3,756	2.4	2.4
Prematurity W/O Major Problems	968	1,037	4.7	4.5
Full Term Neonate W/ Major Problems	877	1,027	7.9	7.6
Neonates, Died or Transferred to Another Acute Care Facility	627	758	6.8	6.2
<u>1-17 years</u>				
Psychoses	2,504	3,432	16.2	16.6
Depressive Neuroses	679	681	13.2	12.8
Vaginal Delivery W/O Complicating Diagnoses	903	.	2.0	.
Simple Pneumonia & Pleurisy W/O CC/MCC	290	398	2.5	2.3
Bronchitis & Asthma W/O CC/MCC	254	416	2.1	2.1
Nutritional & Misc Metabolic Disorders W/O MCC	279	269	2.5	2.8
<u>18-44 years</u>				
Vaginal Delivery W/O Complicating Diagnoses	19,419	.	1.8	.
Cesarean Section W/O CC/MCC	8,751	.	2.6	.
Psychoses	4,149	4,285	8.4	11.1
Cesarean Section W/ CC/MCC	4,009	.	3.6	.
Vaginal Delivery W/ Complicating Diagnoses	2,628	.	2.5	.
Esophagitis, Gastroent & Misc Digest Disorders W/O MCC	1,263	800	3.1	2.8
Uterine & Adnexa Proc for Non-Malignancy W/O CC/MCC	2,015	.	2.0	.
Other Antepartum Diagnoses W/ Medical Complications	1,728	.	2.7	.
Alcohol/Drug Abuse/Dependence W/O Rehab Therapy or MCC	536	980	4.5	4.5
Cellulitis W/O MCC	659	853	3.5	3.4
Poisoning & Toxic Effects of Drugs W/O MCC	799	550	1.9	1.9
<u>45-64 years</u>				
Psychoses	2,786	2,024	9.0	13.7
MAJ Joint Replacement or Reattachment of Lower Extremity	2,210	1,449	3.2	2.9
Esophagitis, Gastroent & Misc Digest Disorders W/O MCC	1,867	1,058	3.2	2.8
Rehabilitation W CC/MCC	1,222	1,103	12.1	13.1
Circulatory Disorders Except AMI, W/ Card Cath W/O MCC	1,066	1,151	2.4	2.4
<u>65-84 years</u>				
Rehabilitation W CC/MCC	4,039	2,417	12.4	12.4
MAJ Joint Replacement or Reattachment of Lower Extremity	3,101	1,723	3.5	3.3
Simple Pneumonia & Pleurisy W/ CC	1,402	1,189	4.9	4.6
Esophagitis, Gastroent & Misc Digest Disorders W/O MCC	1,741	787	3.5	3.3
Septicemia W/O MV 96+ Hours W/ MCC	1,276	1,077	6.6	6.8
<u>85+ years</u>				
Rehabilitation W/ CC/MCC	1,739	631	12.8	12.5
Kidney & Urinary Tract Infections W/O MCC	1,088	238	4.1	3.8
Simple Pneumonia & Pleurisy W/ CC	731	386	5.3	4.9
Septicemia W/O MV 96+ Hours W/ MCC	574	378	5.9	5.9
Heart Failure & Shock W/ CC	658	315	8.0	4.6

Table 2

SECTION 1 - ACUTE CARE FACILITIES

<u>Utilization</u>	<u>Total</u>	<u>%</u>	<u>Large</u>	<u>%</u>	<u>Medium</u>	<u>%</u>	<u>Small</u>	<u>%</u>
Total Discharges	384,871	100.0%	244,349	63.5%	100,285	26.1%	40,237	10.5%

Table 3

An acute care facility or hospital is any facility used for the purpose of providing short-term inpatient diagnostic care and treatment, including general medical care, surgical care, obstetrical care and specialized services or specialized treatment.

Acute care hospitals make up 80 of our 106 reporting hospitals. In addition to general surgical facilities, they include children's hospitals, specialized hospitals such as heart hospitals, and critical access hospitals.

Acute care hospitals are divided into groups based on their urbanity (location within a metropolitan or micropolitan area), their bed size (number of licensed beds), and their teaching status (determined by educational accreditation and intern housing).

Acute care facility size is determined by first identifying the hospital as rural, urban non-teaching, or urban teaching. For each of those three categories, the number of licensed beds in the hospital determines if the facility is small, medium or large.

Critical access hospitals are a specific type of small, rural acute care hospitals that receive federal cost-based reimbursement for their Medicare patients. The critical access group is included in the count for small acute care hospitals.

Summary of Acute Care Facilities

<u>2011 Acute Utilization</u>		<u># Discharges</u>	<u>TPD*</u>	<u>Avg. LOS*</u>	<u>Avg. Charge*</u>	<u>Avg. Cost*</u>	<u>% Routine*</u>
<u>Hospital Urbanity</u>							
	Urban	276,640	1,325,233	4.79	\$27,571	\$8,821	74%
	Rural	108,231	424,187	3.92	\$16,148	\$6,151	65%
<u>Hospital Size/Facility</u>							
	Large	244,349	1,118,263	4.58	\$25,041	\$7,862	71%
	Medium	100,285	481,546	4.80	\$27,006	\$9,210	75%
	Small	40,237	149,611	3.72	\$13,618	\$6,487	68%
	Critical Access**	21,066	84,782	4.02	\$9,100	\$5,891	58%
<u>Patient Gender</u>							
	Male	156,883	754,857	4.81	\$27,615	\$9,054	71%
	Female	227,986	994,562	4.36	\$22,118	\$7,392	72%
<u>Patient Age</u>							
	Under 1 year	42,894	161,011	3.75	\$11,656	\$4,061	95%
	1 – 17 years	12,705	52,860	4.16	\$22,120	\$7,635	94%
	18 – 44 years	89,443	295,353	3.30	\$17,626	\$5,911	91%
	45 - 64 years	93,167	440,661	4.73	\$30,544	\$9,909	75%
	65 - 84 years	113,392	609,060	5.37	\$30,355	\$9,962	54%
	85 years and above	33,270	190,475	5.73	\$21,932	\$7,607	29%
<u>Patient Race</u>							
	White	309,463	1,399,975	4.52	\$24,742	\$8,194	70%
	Black	57,219	281,400	4.92	\$23,862	\$7,876	76%
	Hispanic	11,373	39,885	3.51	\$17,541	\$5,997	91%
	Other	6,816	28,160	4.13	\$22,512	\$7,508	82%
<u>Primary Payer</u>							
	Medicare	168,467	911,579	5.41	\$28,570	\$9,402	53%
	Medicaid	79,965	315,610	3.95	\$17,110	\$5,836	89%
	Private/HMO	81,697	307,584	3.76	\$24,484	\$8,008	85%
	Uninsured	28,582	108,907	3.81	\$20,497	\$6,803	87%
	Other	26,160	105,740	4.04	\$23,223	\$7,894	79%
<u>Patient Residency</u>							
	Urban AR Resident	207,451	946,736	4.56	\$25,216	\$8,086	74%
	Rural AR Resident	158,376	705,179	4.45	\$22,441	\$7,747	68%
	Outside AR	18,811	96,335	5.12	\$31,027	\$10,599	68%
<u>Top 10 DRGs*** by # Discharges</u>							
	Psychoses	9,817	69,292	7.10	\$12,686	\$4,517	82%
	Maj Joint Replace./ Reattach Lower Extremity W/O MCC	9,346	31,231	3.30	\$37,496	\$12,215	36%
	Esophagitis, Gastronent, Misc Digest Disorders W/O MCC	8,868	27,782	3.10	\$13,531	\$4,748	86%
	Simple Pneumonia & Pleurisy W CC	6,079	26,883	4.40	\$17,224	\$6,530	62%
	Kidney & Urinary Tract Infections W/O MCC	5,695	20,629	3.60	\$12,266	\$4,478	59%
	Rehabilitation W CC/MCC	5,693	72,395	12.70	\$31,287	\$10,005	21%
	Cellulitis W/O MCC	5,153	19,858	3.90	\$12,705	\$4,551	74%
	Septicemia W/O MV 96+Hours W MCC	5,060	32,408	6.40	\$32,607	\$11,127	29%
	Perc Cardiova SC Proc W Drug-Eluting Stent W/O MCC	4,881	10,623	2.20	\$46,396	\$13,846	97%
	Circulatory Disorders Except AMI, W Card Cath W/O MCC	4,865	12,183	2.50	\$23,668	\$7,175	92%

Table 4: * TPD abbreviates Total Patient Days, and Avg. LOS abbreviates Average Length of Stay. % Routine represents the % of inpatient discharges that were discharged routinely. Average Charge and Average Cost are defined on page 13.

** Critical Access Hospitals (CAH) are part of the small hospital group, which are reported separately as a point of interest.

*** Top 10 DRGs is excluding newborns and deliveries.

Note: 'W/O' abbreviates 'without' and 'W' abbreviates 'with.'

Note: There were 2 discharges with unknown gender and 233 discharges with unknown residence.

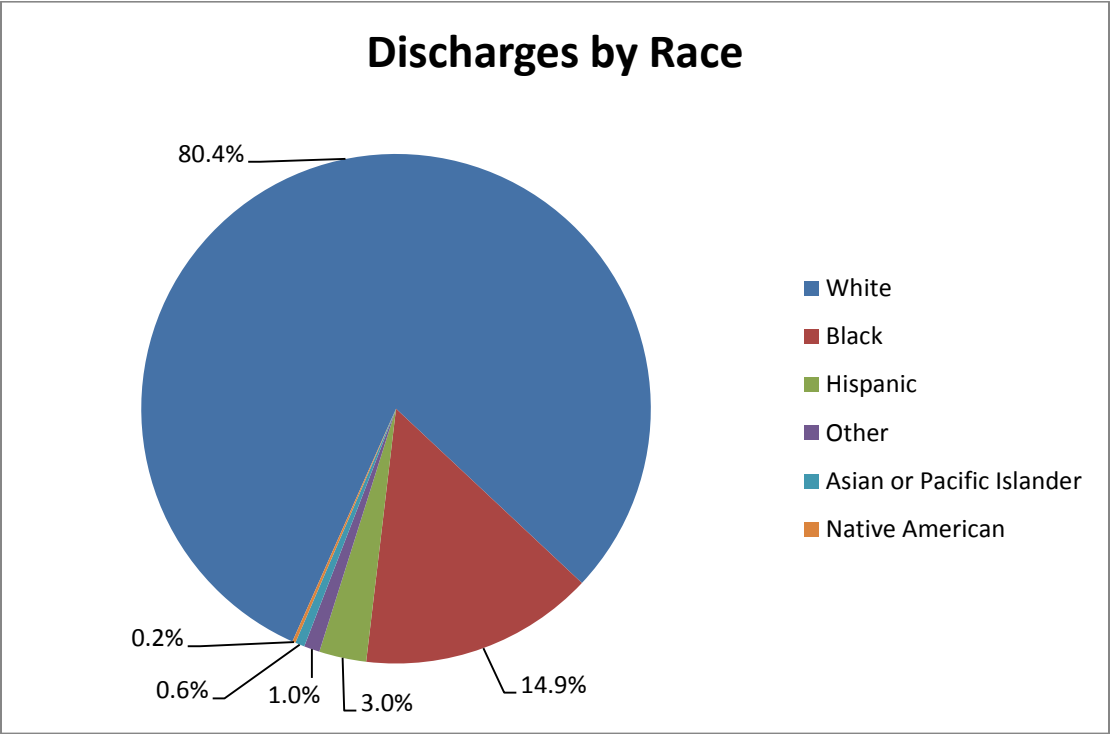
Discharge Status

<u>Utilization</u>	<u>Total</u>		<u>Large</u>		<u>Medium</u>		<u>Small</u>	
<u>Discharge Status</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
Routine	275,016	71.5%	172,370	70.5%	75,106	74.9%	27,540	68.4%
LTAC and Other Facilities	60,014	15.6%	39,653	16.2%	13,062	13.0%	7,299	18.1%
Home Health Care	31,559	8.2%	21,805	8.9%	7,297	7.3%	2,457	6.1%
Another Short-Term Hospital	8,143	2.1%	4,068	1.7%	2,095	2.1%	1,980	4.9%
In-Hospital Deaths	7,844	2.0%	5,003	2.0%	2,069	2.1%	772	1.9%
Against Medical Advice	2,295	0.6%	1,450	0.6%	656	0.7%	189	0.5%

Table 5

Discharge Status represents the circumstances surrounding the discharge from inpatient status and specifies where the patient went after discharged from the hospital.

Discharges by Race

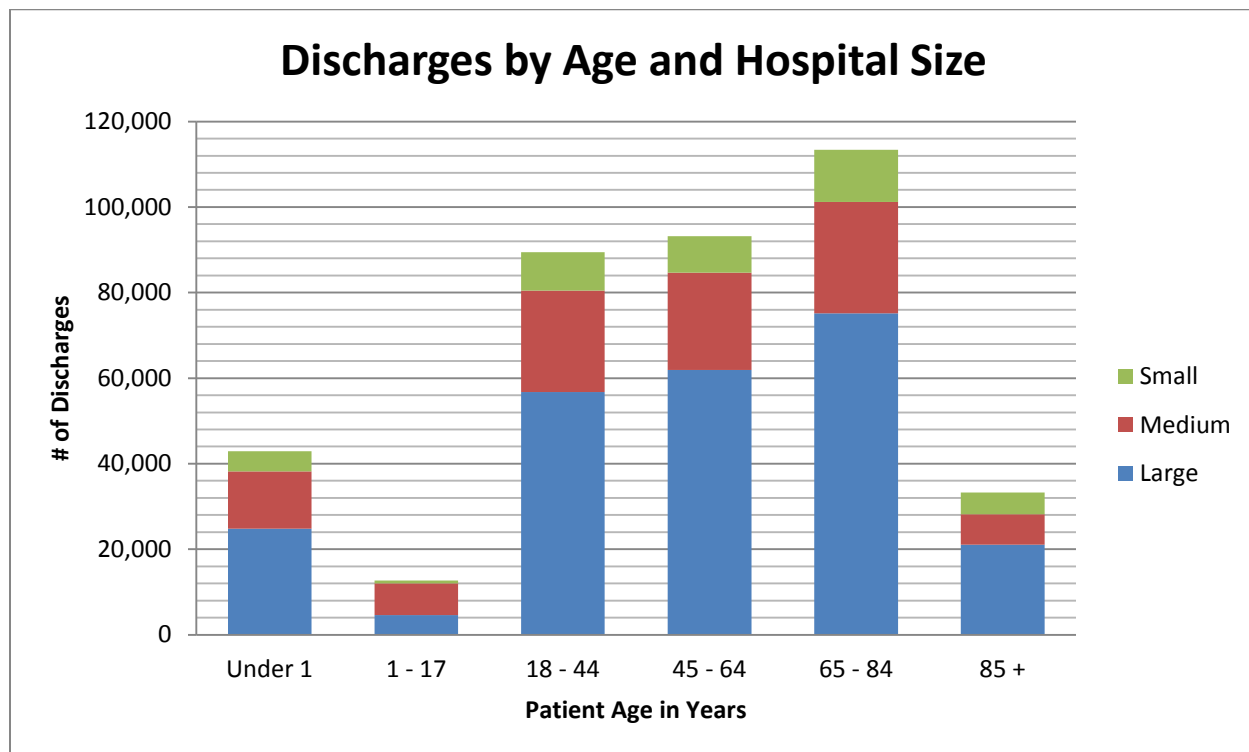


<u>Inpatient Demographic</u> <u>Race/Ethnicity</u>	<u>Total</u>		<u>Large</u>		<u>Medium</u>		<u>Small</u>	
	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
White	309,463	80.4%	199,430	81.6%	78,060	77.8%	31,973	79.5%
Black	57,219	14.9%	35,668	14.6%	16,368	16.3%	5,165	12.8%
Hispanic	11,373	3.0%	5,123	2.1%	4,221	4.2%	2,029	5.0%
Other	3,859	1.0%	2,388	1.0%	1,039	1.0%	432	1.1%
Asian or Pacific Islander	2,180	0.6%	1,259	0.5%	435	0.4%	486	1.2%
Native American	777	0.2%	481	0.2%	144	0.1%	152	0.4%

Table 6

Race represents a combination of two collected fields, patient race and patient ethnicity. For the purposes of this report, the ethnicity Hispanic is included as a mutually exclusive category with the other races.

Discharges by Age and Hospital Size



<u>Inpatient Demographic</u>	<u>Total</u>		<u>Large</u>		<u>Medium</u>		<u>Small</u>	
<u>Age</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
Under 1 year	42,894	11.1%	24,778	10.1%	13,400	13.4%	4,716	11.7%
1 – 17 years	12,705	3.3%	4,635	1.9%	7,342	7.3%	728	1.8%
18 – 44 years	89,443	23.2%	56,777	23.2%	23,704	23.6%	8,962	22.3%
45 - 64 years	93,167	24.2%	61,942	25.3%	22,711	22.6%	8,514	21.2%
65 - 84 years	113,392	29.5%	75,164	30.8%	26,005	25.9%	12,223	30.4%
85 years and above	33,270	8.6%	21,053	8.6%	7,123	7.1%	5,094	12.7%

Table 7

Age represents the patient's age in years at the time of admission to the hospital.

Primary Expected Payer

<u>Utilization: Groups of Interest</u>	<u>Total</u>		<u>Large</u>		<u>Medium</u>		<u>Small</u>	
<u>Primary Payer</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
Medicare	168,467	43.8%	110,510	45.2%	39,087	39.0%	18,870	46.9%
Private/HMO	82,011	21.3%	53,257	21.8%	20,372	20.3%	8,382	20.8%
Medicaid	79,965	20.8%	46,973	19.2%	25,125	25.1%	7,867	19.6%
Self-Pay	28,029	7.3%	17,036	7.0%	8,579	8.6%	2,414	6.0%
Other	21,179	5.5%	12,726	5.2%	6,441	6.4%	2,012	5.0%
Other Govt	4,665	1.2%	3,307	1.4%	673	0.7%	685	1.7%
No Charge	553	0.1%	539	0.2%	8	0.0%	6	0.0%

Table 8: There were 2 discharge cases (One Small, One Large) where Primary Payer was missing.

Primary Payer refers to the expected payer for the hospital stay. The primary payer reported may not be responsible for the whole of the inpatient charges.

Obstetrics

<u>Utilization: Groups of Interest</u>	<u>Total</u>		<u>Large</u>		<u>Medium</u>		<u>Small</u>	
<u>Obstetrics</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
Normal Deliveries	23,954	64.7%	14,714	64.6%	6,253	63.2%	2,987	68.4%
Cesarean Deliveries	13,089	35.3%	8,064	35.4%	3,644	36.8%	1,381	31.6%
Total Deliveries	37,043		22,778		9,897		4,368	
Total Births	37,913		22,944		10,516		4,453	

Table 9

The obstetrics groups presented are the number of inpatient discharges that were admitted for delivery. The delivery types are divided into normal deliveries and cesarean deliveries and do not distinguish between childbirth with or without complications. Total deliveries are a count of mothers, where total births are the number of live births.

Length of Stay, Charges, and Costs

<u>Utilization: Length of Stay (LOS)</u>	<u>Total</u>	<u>%</u>	<u>Large</u>	<u>%</u>	<u>Medium</u>	<u>%</u>	<u>Small</u>	<u>%</u>
Total Patient Days (TPD)	1,756,041	100.0%	1,122,283	63.5%	483,315	26.1%	150,443	10.5%
Average LOS in Days	4.56		4.82		4.82		3.74	

Table 10

<u>Utilization: Charges & Costs</u>	<u>All</u>	<u>Large</u>	<u>Medium</u>	<u>Small</u>
Avg. Charge per day	\$6,707.69	\$6,848.25	\$6,941.27	\$5,271.91
Avg. Charge per discharge	\$24,359.07	\$25,041.25	\$27,006.34	\$13,618.47
Avg. Cost per day	\$2,221.73	\$2,153.04	\$2,324.50	\$2,382.67
Avg. Cost per discharge	\$8,070.01	\$7,862.63	\$9,210.10	\$6,487.87

Table 11: Neither Charges nor Costs represents the actual amounts hospitals collected for services rendered.

Total Patient Days (TPD) represents the sum of inpatient hospital days.

Average Length of Stay (ALOS) is the mean of the length of stays for all inpatient discharges.

The average charges represents the mean total amount billed per discharge, as shown on the billing form, while the average charges per day represents the mean amount charged per day of inpatient hospital status.

The average costs reflect the mean estimated actual costs of production, in contrast to the average charges. Total charges are converted to estimated costs using hospital level cost-to-charge ratios (CCR) based on hospital accounting reports from the Centers for Medicare and Medicaid Services (CMS). The CCRs used are specific to each year; however, it is important to note that the most recent CCR year file available for use with the 2011 data was 2010.

The average charges per day and average costs per day are calculated by dividing the total respective amount (charges or costs) by TPD.

Arkansas Inpatient Discharges by Major Diagnostic Category

<u>Major Diagnostic Category - 2011</u> (MDC)	<u># of</u> <u>Discharges</u>	<u>Avg.</u> <u>Length of Stay</u>	<u>Avg.</u> <u>Charge</u>	<u>Avg.</u> <u>Cost</u>
Disease/Disorder/Circulatory System	57,603	4.3	\$37,110	\$11,471
Disease/Disorder/Respiratory System	43,230	5.1	\$24,001	\$8,377
Pregnancy/Childbirth/Puerperium	40,995	2.3	\$10,902	\$3,852
Newborns/Other Neonates/Perinatal Period	39,311	3.7	\$11,049	\$3,856
Disease/Disorder/Digestive System	32,793	4.9	\$26,273	\$8,651
Disease/Disorder/Musculoskeletal Sys./Conn Tissue	31,987	3.9	\$35,939	\$11,727
Disease/Disorder/Nervous System	22,172	5.4	\$26,207	\$8,853
Disease/Disorder/Kidney/Urinary Tract	17,834	4.5	\$20,811	\$7,031
Mental Disease/Disorder	13,929	7.1	\$13,478	\$4,911
Disease/Disorder/Endocrine/Nutrition/Metabolism	13,014	3.7	\$17,799	\$6,068
Infectious & Parasitic Disease/Systemic Or Unspec. Sites	12,196	6.8	\$36,606	\$12,234
Factors Influencing Hlth Stat./Oth. Contacts	10,544	10.4	\$25,307	\$8,377
Disease/Disorder/Hepatobiliary Sys./Pancreas	10,454	4.9	\$28,039	\$9,265
Disease/Disorder/Skin, Subcutan. Tissue & Breast	9,271	4.2	\$18,182	\$6,221
Disease/Disorder/Female Reproductive Sys.	6,433	2.6	\$21,230	\$7,152
Injuries/Poisoning/Toxic Effects Of Drugs	5,980	3.7	\$21,161	\$6,949
Disease/Disorder/Blood/Blood Forming Organs/Immunology	5,277	4.3	\$22,232	\$7,606
Disease/Disorder/Ear, Nose, Mouth & Throat	2,979	3.5	\$18,384	\$6,090
Myeloproliferative Disease/Disorder/Poorly Dif. Neoplasm	2,857	8.3	\$53,241	\$17,754
Alcohol/Drug Use & Alcohol/Drug Induced Mental Disorder	2,264	3.7	\$11,800	\$3,998
Disease/Disorder/Male Reproductive Sys.	1,903	3.4	\$23,594	\$7,615
Multiple Significant Trauma	720	9.8	\$77,935	\$24,743
HIV Infections	370	7.5	\$38,013	\$12,731
Burns	346	8.8	\$71,377	\$24,618
Disease/Disorder/Eye	295	4.8	\$20,627	\$6,923

Table 12

Major Diagnostic Categories (MDCs) are broad groups of Diagnosis Related Groups (DRGs) that relate to an organ or a system (such as the digestive system) and not to an etiology. Each hospital stay has one DRG and one MDC assigned to it.

SECTION 2 - OTHER CARE FACILITIES

<u>Utilization</u>	<u>LTC</u>	<u>Psychiatric</u>	<u>Rehabilitation</u>
Total Discharges	2,519	15,493	7,337

Table 13

Other care facilities or hospitals as represented in this report are any facilities used for the purpose of providing specific inpatient diagnostic care and treatment, including Long Term Acute Care (LTAC or LTC), Psychiatric care, or Rehabilitation care.

Other care hospitals make up 26 of our 106 reporting hospitals. Psychiatric, rehabilitation, and long term acute care facilities individually make up their own group and are not further divided into subgroups. Psychiatric hospitals provide services for mental, emotional, or substance disorders. Rehabilitation hospitals provide restoration and support services for the disabled. Long term acute care hospitals focus on patients that require special treatment for an extended time.

Discharge Status

<u>Utilization</u>	<u>LTAC</u>		<u>Psychiatric</u>		<u>Rehabilitation</u>	
<u>Discharge Status</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
Routine	396	15.7%	13,514	87.2%	1,865	25.4%
Home Health Care	538	21.4%	1	0.0%	3,638	49.6%
LTAC and Other Facilities	1,019	40.5%	1,627	10.5%	1,016	13.8%
Another Short-Term Hospital	187	7.4%	202	1.3%	784	10.7%
In-Hospital Deaths	365	14.5%	1	0.0%	5	0.1%
Against Medical Advice	14	0.6%	148	1.0%	29	0.4%

Table 14

Discharge Status represents the circumstances surrounding the discharge from inpatient status from long term acute care, rehabilitation, and psychiatric facilities. It specifies where the patient went after discharged from the hospital.

Inpatient Demographics

<u>Utilization: Location</u>	<u>LTAC</u>		<u>Psychiatric</u>		<u>Rehabilitation</u>	
<u>Inpatient's Residency</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
Urban AR Residence	1,476	58.6%	10,358	66.9%	4,941	67.4%
Rural AR Residence	726	28.8%	4,322	27.9%	1,805	24.6%
Outside AR	315	12.5%	805	5.2%	589	8.0%

Table 15

<u>Inpatient Demographic</u>	<u>LTAC</u>		<u>Psychiatric</u>		<u>Rehabilitation</u>	
<u>Gender</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
Male	1,224	48.6%	8,331	53.8%	2,982	40.6%
Female	1295	51.4%	7,162	46.2%	4,355	59.4%

Table 16

<u>Inpatient Demographic</u>	<u>LTAC</u>		<u>Psychiatric</u>		<u>Rehabilitation</u>	
<u>Race/Ethnicity</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
White	2,160	85.7%	11,972	77.3%	6,409	87.4%
Black	302	12.0%	2,773	17.9%	853	11.6%
Hispanic	24	1.0%	305	2.0%	41	0.6%
Other	5	0.2%	202	1.3%	8	0.1%
Native American	17	0.7%	175	1.1%	12	0.2%
Asian or Pacific Islander	11	0.4%	66	0.4%	14	0.2%

Table 17

Residency refers to where the patient lives, 'AR Residence' classification means the inpatient's home ZIP Code is in Arkansas, and 'Outside AR' classification means the inpatient's home ZIP Code is in another state, out of country, or unknown.

The urbanity for the Arkansas residents represents the population of the core based statistical area where the patient lives. Urban residents live in a county with a core urban area of 50,000 or more population. Rural residents live in a county with a core urban area of 10,000 to 49,999 population.

Gender counts include all discharges from long term acute care, psychiatric, and rehabilitation facilities.

Race represents a combination of two collected fields, patient race and patient ethnicity. For the purposes of this report, the ethnicity Hispanic is included as a mutually exclusive category with the other races.

Discharges by Age by Hospital Type

<u>Inpatient Demographic Age</u>	<u>LTAC</u>		<u>Psychiatric</u>		<u>Rehabilitation</u>	
	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
Under 1 year	0	0.0%	0	0.0%	0	0.0%
1 – 17 years	0	0.0%	8,045	51.9%	6	0.1%
18 – 44 years	190	7.5%	4,486	29.0%	465	6.3%
45 - 64 years	770	30.6%	2,158	13.9%	1,739	23.7%
65 - 84 years	1,291	51.3%	621	4.0%	3,928	53.5%
85 years and above	268	10.6%	183	1.2%	1,199	16.3%

Table 18

Age represents the patient's age in years at the time of admission to the hospital as an inpatient.

Primary Expected Payer

<u>Utilization: Groups of Interest</u>	<u>LTAC</u>		<u>Psychiatric</u>		<u>Rehabilitation</u>	
	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>	<u>Count</u>	<u>Distribution</u>
<u>Primary Payer</u>						
Medicare	1,837	72.9%	2,631	17.8%	5,385	73.4%
Private/HMO	623	24.7%	6,863	46.5%	1,305	17.8%
Medicaid	17	0.7%	4,543	30.8%	352	4.8%
Self-Pay	22	0.9%	461	3.1%	164	2.2%
Other Gov't	5	0.2%	266	1.8%	15	0.2%
Other	15	0.6%	7	0.0%	116	1.6%

Table 19: Primary Payer was missing for 722 discharge cases, all of them from Psychiatric facilities.

Primary Payer refers to the expected payer for the hospital stay. The payer group reported may be responsible for all or only part of the inpatient charges.

Length of Stay, Charges, and Costs

<u>Utilization: Length of Stay (LOS)</u>	<u>LTAC</u>	<u>Psychiatric</u>	<u>Rehabilitation</u>
Total Patient Days (TPD)	73,098	247,025	87,677
Average LOS in Days	29.02	15.95	11.95

Table 20

<u>Utilization: Charges & Costs</u>	<u>LTAC</u>	<u>Psychiatric</u>	<u>Rehabilitation</u>
Avg. Charge per day	\$4,305	\$1,217	\$2,047
Avg. Charge per discharge	\$111,717	\$16,863	\$23,501
Avg. Cost per day	\$2,033	\$525	\$987
Avg. Cost per discharge	\$52,526	\$6,783	\$11,344

Table 21: Neither Charges nor Costs represents the actual amounts hospitals collected for services rendered.

Total Patient Days (TPD) represents the sum of inpatient hospital days.

Average Length of Stay (ALOS) is the mean of the length of stays for inpatient discharges from long term acute care, psychiatric, and rehabilitation facilities.

The average charges represents the mean total amount billed per discharge, as shown on the billing form, while the average charges per day represents the mean amount charged per day of inpatient hospital status.

The average costs tend to reflect the mean estimated actual costs of production, in contrast to the average charges. Total charges are converted to estimated costs using hospital level cost-to-charge ratios (CCR) based on hospital accounting reports from the Centers for Medicare and Medicaid Services (CMS). The CCRs used are specific to each year; however, it is important to note that the most recent CCR year file available for use with the 2010 data was 2009.

The average charges per day and average costs per day are calculated by dividing the total respective amount (charges or costs) by TPD.

Discharges by Long Term Acute Care Facilities' MDC

<u>Major Diagnostic Category - 2011 Long Term Acute Care Facility (MDC)</u>	<u># of</u>	<u>Avg.</u>	<u>Avg.</u>	<u>Avg.</u>
	<u>Discharges</u>	<u>LOS</u>	<u>Charge</u>	<u>Cost</u>
Disease/Disorder/Respiratory System	857	27.8	\$138,484	\$65,627
Disease/Disorder/Skin, Subcutan. Tissue & Breast	352	40	\$92,013	\$44,024
Disease/Disorder/Musculoskeletal Sys./Conn Tissue	254	30	\$101,829	\$46,146
Infectious & Parasitic Disease/Systemic Or Unspec. Sites	210	26.2	\$111,077	\$52,525
Disease/Disorder/Circulatory System	175	24.1	\$95,371	\$44,602
Disease/Disorder/Endocrine/Nutrition/Metabolism	138	28.5	\$102,168	\$48,564
Injuries/Poisoning/Toxic Effects Of Drugs	116	29.5	\$109,462	\$49,753
Disease/Disorder/Digestive System	111	25.6	\$96,717	\$47,023
Disease/Disorder/Kidney/Urinary Tract	65	22.7	\$79,120	\$37,556
Factors Influencing Hlth Stat./Oth. Contacts	59	23	\$87,608	\$42,812
Disease/Disorder/Nervous System	55	23.4	\$81,726	\$36,448
Disease/Disorder/Hepatobiliary Sys./Pancreas	53	21.6	\$87,092	\$38,627
Myeloproliferative Disease/Disorder/Poorly Dif. Neoplasm	12	35.3	\$108,491	\$21,112
Disease/Disorder/Male Reproductive Sys.	11	25.5	\$76,757	\$37,952
Disease/Disorder/Ear, Nose, Mouth & Throat	9	32.3	\$99,067	\$46,297
Disease/Disorder/Female Reproductive Sys.	6	36.2	\$174,195	\$91,148
Disease/Disorder/Blood/Blood Forming Organs/Immunology	4	23	\$74,228	\$36,425
HIV Infections	4	26.5	\$84,675	\$37,642
Burns	3	16.3	\$45,261	\$19,283
Disease/Disorder/Eye	1	25	\$65,356	\$32,072
Alcohol/Drug Use & Alcohol/Drug Induced Mental Disorder	1	28	\$204,311	\$100,260

Table 22: MDCs 14, 15, 19 and 24 were not present in the LTAC inpatient population. There are discharges with unknown MDCs.

Major Diagnostic Categories (MDCs) are broad groups of Diagnosis Related Groups (DRGs) that relate to an organ or a system (such as the digestive system) and not to an etiology. Each hospital stay has one DRG and one MDC assigned to it.

Discharges by Psychiatric Facilities' MDC

<u>Major Diagnostic Category - 2011 Psychiatric Facilities</u> (MDC)	<u># of</u> <u>Discharges</u>	<u>Avg.</u> <u>LOS</u>	<u>Avg.</u> <u>Charge</u>	<u>Avg.</u> <u>Cost</u>
Mental Disease/Disorder	14,235	16.4	\$17,384	\$6,983
Alcohol/Drug Use & Alcohol/Drug Induced Mental Disorder	1,099	6.8	\$7,567	\$3,146
Disease/Disorder/Nervous System	91	10.8	\$13,214	\$8,785
Pregnancy/Childbirth/Puerperium	44	43.7	\$36,215	\$8,656
Factors Influencing Hlth Stat./Oth. Contacts	8	12	\$11,644	\$56,544
Injuries/Poisoning/Toxic Effects Of Drugs	7	219	\$178,866	\$67,128
HIV Infections	6	252.7	\$210,206	\$9,414
Disease/Disorder/Endocrine/Nutrition/Metabolism	2	14.5	\$16,193	\$43,264

Table 23: 17 of the 25 MDCs were not present in the Psychiatric inpatient population.

Discharges by Rehabilitation Facilities' MDC

<u>Major Diagnostic Category - 2011 Rehabilitation Facilities</u> (MDC)	<u># of</u> <u>Discharges</u>	<u>Avg.</u> <u>LOS</u>	<u>Avg.</u> <u>Charge</u>	<u>Avg.</u> <u>Cost</u>
Factors Influencing Hlth Stat./Oth. Contacts	7,220	12	\$23,475	\$11,328
Disease/Disorder/Nervous System	67	13.2	\$26,959	\$13,242
Disease/Disorder/Musculoskeletal Sys./Conn Tissue	35	11.5	\$23,982	\$11,854
Disease/Disorder/Circulatory System	9	9	\$19,611	\$9,623
Myeloproliferative Disease/Disorder/Poorly Dif. Neoplasm	1	13	\$33,409	\$16,394
Disease/Disorder/Skin, Subcutan. Tissue & Breast	1	3	\$6,578	\$3,228
Multiple Significant Trauma	1	7	\$13,724	\$6,735
Disease/Disorder/Respiratory System	1	9	\$16,764	\$8,226
Disease/Disorder/Digestive System	1	8	\$15,462	\$7,588
Infectious & Parasitic Disease/Systemic Or Unspec. Sites	1	14	\$30,480	\$14,957

Table 24: 15 of the 25 MDCs were not present in the Rehabilitation inpatient population.

APPENDIX A: Hospitals by Size Category & Facility Type

ACUTE CARE FACILITIES

LARGE

Arkansas Methodist Medical Center	Greene County, Paragould
Baptist Health Medical Center - Little Rock	Pulaski County, Little Rock
Baptist Health Medical Center - North Little Rock	Pulaski County, North Little Rock
Baxter Regional Medical Center	Baxter County, Mountain Home
Forrest City Medical Center	St Francis County, Forrest City
Great River Medical Center	Mississippi County, Blytheville
Harris Hospital	Jackson County, Newport
Helena Regional Medical Center	Phillips County, Helena
Jefferson Regional Medical Center	Jefferson County, Pine Bluff
Johnson Regional Medical Center	Johnson County, Clarksville
Medical Center of South Arkansas	Union County, El Dorado
North Arkansas Regional Medical Center	Boone County, Harrison
Northeast Arkansas Medical Center	Craighead County, Jonesboro
Northwest Medical Center - Springdale	Washington County, Springdale
Ouachita County Medical Center	Ouachita County, Camden
Sparks Health System	Sebastian County, Fort Smith
St. Bernard's Medical Center	Craighead County, Jonesboro
St. Edward Mercy Medical Center	Sebastian County, Fort Smith
St. Joseph's Mercy Health Center Inc.	Garland County, Hot Springs
St. Mary's Regional Medical Center	Pope County, Russellville
St. Vincent Infirmary Medical Center	Pulaski County, Little Rock
Washington Regional Medical Center	Washington County, Fayetteville
White County Medical Center	White County, Searcy
White River Medical Center	Independence County, Batesville

MEDIUM

Arkansas Children's Hospital	Pulaski County, Little Rock
Arkansas Heart Hospital	Pulaski County, Little Rock
Baptist Health Medical Center - Stuttgart	Arkansas County, Stuttgart
Chambers Memorial Hospital	Yell County, Danville
Conway Regional Medical Center	Faulkner County, Conway
Crittenden Regional Hospital	Crittenden County, West Memphis
Drew Memorial Hospital	Drew County, Monticello
Five Rivers Medical Center	Randolph County, Pocahontas
Hot Spring County Medical Center	Hot Spring County, Malvern
Magnolia Regional Medical Center	Columbia County, Magnolia
Mena Regional Health System	Polk County, Mena
Mercy Medical Center	Benton County, Rogers
National Park Medical Center	Garland County, Hot Springs
North Metro Medical Center	Pulaski County, Jacksonville
Northwest Medical Center - Bentonville	Benton County, Bentonville
Saline Memorial Hospital	Saline County, Benton
Summit Medical Center	Crawford County, Van Buren
U.A.M.S. Medical Center	Pulaski County, Little Rock

SMALL (including Critical Access Hospitals*)

Arkansas Department of Correction - Care Facility	Jefferson County, Pine Bluff
Arkansas Surgical Hospital	Pulaski County, North Little Rock
Ashley County Medical Center*	Ashley County, Crossett
Baptist Health Medical Center - Arkadelphia*	Clark County, Arkadelphia
Baptist Health Medical Center - Heber Springs*	Cleburne County, Heber Springs
Booneville Community Hospital*	Logan County, Booneville
Bradley County Medical Center*	Bradley County, Warren
Chicot Memorial Hospital*	Chicot County, Lake Village
Community Medical Center of Izard County*	Izard County, Calico Rock
CrossRidge Community Hospital*	Cross County, Wynne

Dallas County Medical Center*
 Dardanelle Hospital*
 De Queen Medical Center Inc.*
 De Witt Hospital and Nursing Home Inc.*
 Delta Memorial Hospital*
 Eureka Springs Hospital*
 Fulton County Hospital*
 HealthPark Hospital
 Howard Memorial Hospital*
 Lawrence Memorial Hospital*
 Levi Hospital
 Little River Memorial Hospital*
 McGehee-Desha County Hospital*
 Medical Park Hospital
 Mercy Hospital of Scott County*
 Mercy Hospital/Turner Memorial*
 North Logan Mercy Hospital*
 Ozark Health*
 Ozarks Community Hospital of Gravette*
 Physicians Specialty Hospital
 Piggott Community Hospital*
 S.M.C. Regional Medical Center*
 Siloam Springs Memorial Hospital
 St. Anthony's Medical Center*
 St. John's Hospital - Berryville*
 St. Vincent Medical Center - North
 Stone County Medical Center*
 Willow Creek Women's Hospital

PSYCHIATRIC FACILITIES

Arkansas State Hospital
 Pinnacle Pointe Behavioral Healthcare System
 Rivendell Behavioral Health Services of Arkansas
 Springwoods Behavioral Hospital
 The BridgeWay
 United Methodist Behavioral Hospital
 Vista Health - Fayetteville
 Vista Health - Fort Smith
 Vista Health - Texarkana

LONG TERM ACUTE CARE FACILITIES

Advance Care Hospital of Fort Smith
 Advance Care Hospital of Hot Springs
 Advanced Care Hospital of White County
 Allegiance Specialty Hospital of Little Rock LLC
 Baptist Health Extended Care
 Regency Hospital of Northwest Arkansas
 Regency Hospital of Springdale
 Select Specialty Hospital - Fort Smith
 Select Specialty Hospital - Little Rock/STVI

REHABILITATION FACILITIES

Baptist Health Rehabilitation Institute
 Conway Regional Rehabilitation Hospital
 HealthSouth Rehabilitation Hospital
 HealthSouth Rehabilitation Hospital of Fort Smith
 HealthSouth Rehabilitation Hospital of Jonesboro
 Hot Springs Rehabilitation Center
 Southeast Rehabilitation Hospital
 St. Vincent Rehabilitation Hospital

Dallas County, Fordyce
 Yell County, Dardanelle
 Sevier County, De Queen
 Arkansas County, De Witt
 Desha County, Dumas
 Carroll County, Eureka Springs
 Fulton County, Salem
 Garland County, Hot Springs
 Howard County, Nashville
 Lawrence County, Walnut Ridge
 Garland County, Hot Springs
 Little River County, Ashdown
 Desha County, McGehee
 Hempstead County, Hope
 Scott County, Waldron
 Franklin County, Ozark
 Logan County, Paris
 Van Buren County, Clinton
 Benton County, Gravette
 Washington County, Fayetteville
 Clay County, Piggott
 Mississippi County, Osceola
 Benton County, Siloam Springs
 Conway County, Morrilton
 Carroll County, Berryville
 Pulaski County, Sherwood
 Stone County, Mountain View
 Washington County, Johnson

Pulaski County, Little Rock
 Pulaski County, Little Rock
 Saline County, Benton
 Washington County, Fayetteville
 Pulaski County, North Little Rock
 Pulaski County, Maumelle
 Washington County, Fayetteville
 Sebastian County, Fort Smith
 Miller County, Texarkana

Sebastian County, Fort Smith
 Garland County, Hot Springs
 White County, Searcy
 Pulaski County, Little Rock
 Pulaski County, Little Rock
 Washington County, Fayetteville
 Washington County, Springdale
 Sebastian County, Fort Smith
 Pulaski County, Little Rock

Pulaski County, Little Rock
 Faulkner County, Conway
 Washington County, Fayetteville
 Sebastian County, Fort Smith
 Craighead County, Jonesboro
 Garland County, Hot Springs
 Chicot County, Lake Village
 Pulaski County, Sherwood

Appendix B: Methods and Methodology

Normal Deliveries were defined using the following DRGs for 2011:

DRG	<u>Procedure Description</u>
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767	Vaginal delivery with sterilization and/or D&C
768	Vaginal delivery with O.R. procedure except sterilization and/or D&C
774	Vaginal delivery with complicating diagnoses
775	Vaginal delivery without complicating diagnoses

Cesarean Deliveries were defined using the following DRGs for 2011:

DRG	<u>Procedure Description</u>
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765	Cesarean Section with CC/MCC
766	Cesarean Section without CC/MCC

Total Births were defined using the following DRGs for 2011:

DRG	<u>Procedure Description</u>
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790	Extreme immaturity or respiratory distress syndrome, neonate
791	Prematurity with major problems
792	Prematurity without major problems
793	Full term neonate with major problems
794	Neonate with other significant problems
795	Normal newborn

Reasons for hospital stays are based on principal diagnosis defined by the following Major Diagnostic Categories (MDC):

MDC	<u>Category Description</u>
------------	------------------------------------

0	Principal diagnosis cannot be assigned to MDC (invalid or pre-MDC)
1	Diseases and disorders of the nervous system
2	Diseases and disorders of the eye
3	Diseases and disorders of the ear, nose, mouth and throat
4	Diseases and disorders of the respiratory system
5	Diseases and disorders of the circulatory system
6	Diseases and disorders of the digestive system
7	Diseases and disorders of the hepatobiliary system and pancreas
8	Diseases and disorders of the musculoskeletal system and connective tissue
9	Diseases and disorder of the skin, subcutaneous tissue and breast
10	Endocrine, nutritional and metabolic diseases and disorders
11	Diseases and disorders of the kidney and urinary tract
12	Diseases and disorders of the male reproductive system
13	Diseases and disorders of the female reproductive system
14	Pregnancy, childbirth and the puerperium
15	Newborns and other neonates with conditions originating in the perinatal period
16	Diseases and disorders of blood, blood forming organs, immunological disorders
17	Myeloproliferative diseases and disorders, poorly differentiated neoplasm
18	Infectious and parasitic diseases, systemic or unspecified sites
19	Mental diseases and disorders
20	Alcohol/drug use and alcohol/drug induced organic mental disorders
21	Injuries, poisonings and toxic effects of drugs
22	Burns
23	Factors influencing health status and other contacts with health services
24	Multiple significant trauma
25	Human Immunodeficiency Virus infections

APPENDIX C: Glossary

Acute conditions - are severe and sudden in onset. Symptoms appear, change, or worsen rapidly, as in a heart attack or broken bone.

Age - the patient's age is calculated on the basis of the admission date to the hospital and date of birth. Information is listed as provided in the medical record. Categories: Less than 1 year, 1 to 17 years, 18 to 44 years, 45 to 64 years, 65 to 84 years, 85 years and older.

Average (mean) - the sum of all values divided by the number of values. For example, to determine the average charge per discharge for seven pneumonia patients in a particular hospital, the charges for each patient are added together and divided by seven.

Average length of stay (ALOS) - The number of days of care accumulated by patients discharged during the year divided by the number of these patients. Length of stay affects charges because longer stays generate higher charges. In addition, it may be a rough indicator of hospital efficiency or program philosophy.

Charges - represents the amounts billed to the inpatient for services provided and does not include professional (MD) fees. Charges do not represent the actual amount hospitals collected for services rendered nor do they reflect the cost of operation.

Charges: Average Charges - the mean total amount billed per discharge, as shown on the billing form.

Charges: Average Charges per Day - the mean amount charged per day of inpatient hospital status.

Chronic condition - a condition that lasts twelve months or longer and meets one or both of the following tests: (a) it places limitations on self-care, independent living, and social interactions; and (b) it results in the need for ongoing intervention with medical products, services, and special equipment.

Costs - estimates and reflects the costs of production. Total charges were converted to costs using cost-to-charge ratios (CCR) acquired through the HCUP Central Distributor. The files provided individual hospital and hospital group CCR ratios based on hospital accounting reports from the Centers for Medicare and Medicaid Services (CMS). In general, costs are less than charges. Costs do not represent the actual amount hospitals collected for services rendered.

Costs: Average Costs - the mean estimated actual costs of production related to the Average Charges.

Costs: Average Costs per Day - the mean estimated actual costs of production related to the Average Charge per Day.

Denominator - the number of people (population) who are potentially capable of experiencing the event or outcome of interest. The denominator, along with the numerator, is used to calculate rates. The denominator is the bottom half of a fraction.

Diagnosis - a disease or injury (or factor that influences health status and contact with health services that is not itself a current illness or injury) listed on the medical record of a patient. (Also see Principal Diagnosis.) All-listed diagnoses include all diagnoses reported on the discharge record. There is space for up to nine diagnoses to be coded prior to calendar year 2008. From 2008 onward, there is space to code up to eighteen diagnoses.

Discharge - the formal release of a patient by a hospital; that is, the termination of a period of hospitalization by death, by disposition to place of residence, nursing home, another hospital or facility, or by the patient's choice. The terms "discharges," "patients discharged" and "hospitalizations" are used synonymously.

Discharge Status - represents the circumstances surrounding the discharge from inpatient status and specifies the destination of the patient after discharge. The present categories are: Against Medical Advice, Another Short-Term Hospital, Home Health Care, In-Hospital Deaths, LTAC and Other Facilities, and Routine.

Discharge Status: Against Medical Advice - the patient discontinued care or left against medical advice.

Discharge Status: Another Short-Term Hospital - the patient was discharged to be directly and immediately admitted as an inpatient to another short-term acute care hospital.

Discharge Status: Home Health Care - the patient was discharged to the care of home health services or to a hospice.

Discharge Status: In-Hospital Deaths - the patient expired (died) while admitted as an inpatient to the hospital.

Discharge Status: LTAC and Other Facilities - the patient was discharged to be directly and immediately admitted as an inpatient to a long term acute care (LTAC) hospital, skilled nursing facility (SNF), intermediate care facility (ICF), psychiatric hospital, inpatient rehabilitation facility (IRF), designated cancer center, or children's hospital.

Discharge Status: Routine - the patient was discharged to home or self care.

DRG - Diagnosis Related Group - groups based on diagnosis codes doctors and hospitals put on patient's medical bills that Medicare uses to determine payment to the hospital.

Gender - coded as male or female, and appears as provided on the medical record.

Gender: Female - all woman and girl inpatients, including female newborns and females giving birth, unless otherwise noted.

Gender: Male - all man and boy inpatients, including male newborns, unless otherwise noted.

ICD-9-CM - stands for "International Classification of Diseases - 9th revision - Clinical Modification." All diagnoses (or conditions) and all procedures that patients receive in the hospital are assigned an ICD-9-CM code. Codes for diagnoses can be up to 5 digits long. Codes for procedures can be up to 4 digits long. There are about 12,000 diagnosis codes and about 3,500 procedure codes. Each hospital stay can have multiple diagnoses and multiple procedures.

Length of stay (LOS) - the number of nights the patient remained in the hospital for this stay. A patient admitted and discharged on the same day has a length of stay = 0.

MDC - Major Diagnostic Categories - broad groups of Diagnosis Related Groups (DRGs) that relate to an organ or a system (such as the digestive system) and not to an etiology. Examples include MDC 01 - Diseases and Disorders of the Nervous System, MDC 02 - Diseases and Disorders of the Eye, MDC 03 - Diseases and Disorders of the Ear, Nose, Mouth and Throat. Each hospital stay has one DRG and one MDC assigned to it.

Number of Discharges per 1,000 Population - the ratio of inpatient discharges per 1,000 of Arkansas resident population as recorded by state census estimates for the given calendar year.

Obstetrics - the number of inpatient discharges that were admitted for childbirth or that were born. The delivery types are divided into Normal and Cesarean Deliveries and do not distinguish between childbirth with or without complications.

Obstetrics: Cesarean Deliveries - a surgical method of delivering babies through an abdominal incision in the womb.

Obstetrics: Normal Deliveries - a method of delivering babies vaginally.

Obstetrics: Total Birth - the number of children born not including stillborns.

Obstetrics: Total Deliveries - a count of mothers admitted as an inpatient for delivering. This number includes mothers who give birth to a stillborn child. A mother who gives birth to multiple children (twins, triplets, etc.) would only be counted once in this number.

Patient - a person who is formally admitted to the inpatient service of an Arkansas licensed hospital for observation, care, diagnosis or treatment. For the purposes of this report, the terms “patient” and “inpatient” are used synonymously.

Primary Payer - the expected source of payment for this hospitalization bill. The primary payer listed on an inpatient’s UB may not be responsible for the total inpatient charges. Payer combines the more detailed categories into the more general groups of Medicare, Medicaid, Private/HMO Insurance, Self-Pay, No Charge, and Other. Sometimes Self-Pay and No Charge records are reported under the category Uninsured.

Primary Payer: Medicare - reimbursement under Part A (facility care) of Title 18. Medicare is a federal health insurance program for the elderly and disabled. It includes fee-for-service and managed care Medicare patients.

Primary Payer: Medicaid - reimbursement from Arkansas’ Medicaid (Title 19) program. Medicaid is a federal/state program that helps pay for health care for indigent and other eligible persons.

Primary Payer: No Charge - the facility did not charge for the inpatient treatment provided. Medically Indigent/Free.

Primary Payer: Other - reimbursement from CHAMPUS (Civilian Health and Medical Program of the Uniformed Services), county general relief and other programs, medical assistance from a state other than Arkansas, and other government sources including Worker’s Compensation and Title V.

Primary Payer: Private/HMO - reimbursement from Blue Cross/Blue Shield and other traditional insurance companies, alternative payment systems (e.g., HMO’s, PPO’s), self-funded plans.

Primary Payer: Self-pay - reimbursement from a patient’s own resources. Self-pay may also include insurance that has not been assigned (reimbursement made directly to the patient, rather than to the hospital).

Percent - A part of a whole, represented as a fraction of 100 and symbolized with %. For example, if, of 3467 patients, 1520 are male, the percent male is calculated as $(1520/3467)*100=43.8\%$.

Principal Diagnosis - the condition established after study to be primarily responsible for causing the admission of the patient to the hospital for care. The principal diagnosis should be the first listed diagnosis in the hospital discharge record.

Procedure - A surgical or non-surgical operation or a series of steps or tests made to reach a diagnosis, or a special treatment, reported on the medical record of a patient. There is space for up to six procedures to be coded prior to calendar year 2008. From 2008 onward, there is space to code up to eight procedures.

Race - the Race category presented in this summary report combines both billing form fields race and ethnicity. The racial designations collected are American Indian or Alaskan Native, Asian or Pacific Islander, Black, White, Other, and Unknown. The ethnicity designations collected are: Hispanic Origin, Not of Hispanic Origin, Unknown. Any patient with a recorded ethnicity of Hispanic Origin is in the Race category Hispanic; otherwise each patient is in a category containing the race reported on the billing form.

Race: Asian or Pacific Islander - represents inpatients that reported demographic for race was Asian or Pacific Islander and for ethnicity was Not of Hispanic Origin or Unknown.

Race: Black - represents inpatients that reported demographic for race was Black and for ethnicity was Not of Hispanic Origin or Unknown.

Race: Hispanic - represents all inpatients that reported demographic for ethnicity was Hispanic Origin.

Race: Native American - represents inpatients that reported demographic for race was American Indian or Alaskan Native and for ethnicity was Not of Hispanic Origin or Unknown.

Race: Other - represents inpatients that reported demographic for race was Other and for ethnicity was Not of Hispanic Origin or Unknown.

Race: White - represents inpatients that reported demographic for race was White and for ethnicity was Not of Hispanic Origin or Unknown.

Rate - rate is how often a particular event occurs in a population. For example, how often a procedure was done in a population, or how many cases of a particular condition occur in a population. Sometimes the rate is displayed as the number of procedures out of 100, 1,000, 10,000 or 100,000.

Residency - where the inpatient lives according to the FIPS code of the patient address field on the billing form. Residency is divided into two categories, Arkansas residents and Other residents.

Residency: Arkansas - patients whose FIPS code is for a county in Arkansas, 05001 to 05149.

Residency: Other - patients with a home address in another state, out of country, or unknown.

Size and Facility Type - categorizes the general medical surgery licensed hospitals as Small, Medium, or Large based on the number of inpatient beds it has, and categorizes the other licensed hospitals as Rehabilitation, Psychiatric, and Long Term Acute Care. It also lists a specialized type of small acute care hospital, Critical Access Hospitals, as they are a group of interest. For the acute care hospitals, the number of beds for each size differs if the hospital is rural, urban non-teaching, or urban teaching. A table detailing these ranges can be found in Appendix C.

Size and Facility Type: Large - size category for rural hospitals with 75+ beds, urban nonteaching hospitals with 200+ beds, and urban teaching hospitals with 450+ beds.

Size and Facility Type: Medium - size category for rural hospitals with 40-74 beds, urban nonteaching hospitals with 100-199 beds, and urban teaching hospitals with 250-449 beds.

Size and Facility Type: Small - size category for rural hospitals with 1-39 beds, urban nonteaching hospitals with 1-99 beds, and urban teaching hospitals with 1-249 beds.

Size and Facility Type: Rehabilitation Hospitals - provide a comprehensive array of restoration services for the disabled, with support services necessary to help them attain their maximum health and competence.

Size and Facility Type: Psychiatric Hospitals - provide diagnostic and therapeutic services to patients with mental, emotional and/or substance-dependency (drug or alcohol) disorders.

Size and Facility Type: Long-Term Acute Care Hospitals - focus on patients with serious medical problems that require intense, special treatment for a long time (usually 20-30 days).

Size and Facility Type: Critical Access Hospitals (CAH) - small, generally rural hospitals meeting certain criteria that certify them to receive cost-based reimbursement from Medicare to improve their financial stability and reduce chance of closure. CAH certification is under a different set of Medicare Conditions of Participation (CoP) that are more flexible than the acute care hospital CoPs. Some of the general criteria that must be met include that the hospital be over 35 miles from another hospital or 15 miles if in mountainous terrain or areas with only secondary roads, have a maximum of 25 acute care inpatient beds, provide 24-hour emergency services, and maintain an annual average length of stay of 96 hours or less for their acute care patients.

South Region - refers to the southern area of the U.S. as grouped by the HCUP Nationwide Inpatient Sample, and is comprised of the states Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

Total Discharges - aggregated totals of both resident and nonresident inpatient discharges reported by each hospital for the given calendar year. Discharges are reported by Arkansas hospitals and include all Acute Care, Long Term Acute Care (LTAC), Psychiatric, and Rehabilitation hospitals. They do not include the discharges from the two Veteran's Affairs Medical Centers.

UB-04 Form - a uniform patient billing form (HCFA-1450) developed by a national uniform billing committee under the auspices of the Federal Health Care Financing Administration.

Urbanity - the U.S Office of Management and Budget defines urbanity depending on county's geographical area around an urban core as metropolitan and micropolitan statistical areas. Each metropolitan or micropolitan area, along with its urban core that is defined, is made up of one or more counties containing the urban core and any counties adjacent with high integration with the urban core.

Urbanity: Urban - a metropolitan (urban) area contains an urban core of 50,000 or more population.

Urbanity: Rural - a micropolitan (rural) area contains an urban core of at least 10,000 but less than 50,000 population.

Utilization - statistics reporting on the usage of hospital facilities and services.

APPENDIX D: References

Sources

- ¹Arkansas Department of Health, Arkansas Hospital Discharge Data System, Little Rock, AR.
<http://www.healthy.arkansas.gov/programsServices/healthStatistics/Pages/HospitalDischarge.aspx>
- ²U.S Census Bureau MSA – Urbanity - U.S. Census Bureau, Population Division, Washington, DC.
<http://www.census.gov/population/www/metroareas/metroarea.html>
- ³U.S. Department of Commerce, Bureau of Economic Analysis. (2011) National Economic Accounts. Retrieved from <http://www.bea.gov/index.htm>.
- ⁴U.S. Department of Health & Human Services. (2011) 2008 National Statistics on All Stays – HCUPnet. Retrieved from <http://hcupnet.ahrq.gov/>.
- ⁵U.S. Department of Health & Human Services. (2011) HCUPnet – Bedsizes – HCUPnet Definitions. Retrieved from
[http://hcupnet.ahrq.gov/HCUPnet.jsp?Id=24C37275CB8B027A&Form=MAINSEL&JS=Y&Action=%3E%3ENext%3E%3E&HCUPnet definitions.x=1](http://hcupnet.ahrq.gov/HCUPnet.jsp?Id=24C37275CB8B027A&Form=MAINSEL&JS=Y&Action=%3E%3ENext%3E%3E&HCUPnet%20definitions.x=1).

Other Information

- Software Used:
 - SAS - www.sas.com